

In the claims:

- 1-3. (Previously Cancelled)
4. (Cancelled)
5. (Original) The electrical connector of claim 4 wherein said insulating plug includes a center aperture for supporting an electrical conductor insulated from said electrically conductive housing.
6. (Original) The electrical connector of claim 5 wherein the center aperture of said insulating plug is adapted to receive and support the center conductor of a coaxial cable.
7. (Original) The electrical connector of claim 5 wherein the center aperture of said insulating plug is adapted to receive and support a conductive prong projecting into the bore of said housing for making electrical contact with the center conductor of a coaxial cable.
8. (Previously Amended) The electrical connector of claim 37 wherein the inner periphery of said housing and the outer periphery of said compression cap are threaded for longitudinal axial engagement.

9. (Previously Amended) The electrical connector of claim 37 wherein the inner periphery of said housing and the outer periphery of said compression cap engage in a longitudinal axial interference fit.

10. (Original) The electrical connector of claim 9 wherein the inner periphery of said housing and the outer periphery of said compression cap are cooperatively ridged and grooved to interlock in a longitudinal axial interference fit.

11. (Original) The electrical connector of claim 10 wherein compression cap is of deformable material and the side wall of said compression cap is slotted between the point of interlock and the closed end thereof to deform radially toward the axis of the bore and to clamp on to the outer insulation layer of a coaxial cable.

12-13. (Previously Cancelled)

14. (Previously Amended) The electrical connector according to claim 43, wherein a first end of the means for penetrating has a beveled edge, wherein the means for urging has a beveled edge, as said means for urging is inserted into the open end of said housing, the beveled edge of said means for urging pushes the beveled edge of said means for penetrating to cause the first end of said means for penetrating to penetrate into the outer insulation layer of the insulated conductor.

15-18. (Previously Cancelled)

19. (Previously Amended) The electrical connector according to claim 44, wherein said at least one clamping arm is integral with the housing.

20. (Previously Amended) The electrical connector according to claim 44, wherein a first end of said at least one clamping arm has a beveled edge, wherein as said engaging means is inserted into the open end of said housing, a beveled edge of said engaging means pushes the beveled edge of said at least one clamping arm to cause the first end of said at least one clamping arm to penetrate an outer insulating layer of the insulated electrical conductor.

21. (Previously Cancelled)

22. (Previously Amended) The electrical connector according to claim 44, wherein the engaging means threadably engages the open end of the housing, such that insertion of the engaging means is caused by threading the engaging means with respect to the open end of the housing.

23. (Previously Cancelled)

24. (Previously Amended) The electrical connector according to claim 39, wherein the housing has a groove adapted to receive a discrete protrusion on the beveled ring, wherein the discrete protrusion is guided by the groove as the beveled ring is pushed by the compression ring, and wherein the discrete protrusion and groove prevent the beveled ring from rotating with respect to the housing.

25. (Cancelled)

26-27. (Previously Cancelled)

28. (Previously Amended) The electrical connector according to claim 41, wherein the pin has a hollow portion protruding into the first end of the connector for receiving a solid center conductor.

29. (Original) The electrical connector according to claim 28, wherein the hollow portion of the pin has at least one slit allowing the hollow portion to expand as a solid center conductor enters the hollow portion.

30. (Previously Amended) The electrical connector according to claim 41, wherein the pin has a solid portion protruding into the first end of the connector for contacting the center conductor of the insulated electrical conductor.

31. (Previously Cancelled)

32. (Previously Amended) The electrical connector according to claim 42, wherein the cap comprises at least one slot which allows the cap to compress when inserting the cap into the first end of the housing.

33-34. (Previously Cancelled)

35. (Previously Amended) The electrical connector according to claim 44 wherein said engaging means is adapted to be slidably pushed into said open end of said housing.

36. (Previously Cancelled)

37. (Currently Amended) An electrical connector for coupling to ~~an electrical a~~ coaxial cable ~~of the coaxial type~~ having a center conductor enclosed in an inner insulation layer and a conductive sheath around the inner insulation layer and an outer insulation layer overlying the conductive sheath, comprising:

a housing having an axial bore therein with an inner periphery for receiving a the coaxial cable in one end thereof, ~~the coaxial cable having a center conductor enclosed in an inner insulation layer and a conductive sheath around the inner insulation layer and an outer insulation layer overlying the conductive sheath,~~ said housing being electrically conductive and having an

insulator plug terminating the bore therein and acting as a stop for the coaxial cable received in the bore;

an electrically conductive clamp in the bore of said housing and electrically connected to said housing at the inner periphery thereof, said electrically conductive clamp having a pointed end shaped and sized for driving into the outer ~~insulated~~ insulation layer of the coaxial cable to engage the conductive sheath thereof, and

a cylindrical compression cap having an end wall apertured to receive the coaxial cable in passage to said electrically conductive housing and having a side wall with an outer periphery sized for engaging the inner periphery of said housing and shaped at an end of the side wall for engaging the pointed end of said electrically conductive clamp to drive the pointed end thereof toward the axis of the bore in said housing thereby to mechanically connect the coaxial cable to said housing and to electrically connect the conductive sheath of the coaxial cable to said housing through said conductive clamp, wherein the pointed end of said conductive clamp is ramp shaped and the end of the side wall of said cylindrical compression cap is complementarily ramp shaped so that upon mutual engagement longitudinally along the axis of the said housing, the pointed end of said conductive clamp is driven radially toward the axis of said housing.

38. (Previously Presented) An electrical connector for coupling to an insulated electrical conductor of a coaxial cable type having a center conductor enclosed in an inner insulation layer and a conductive sheath around the inner insulation layer which is enclosed in an outer insulation layer, comprising:

a housing having a first end for receiving an end of an insulated electrical conductor;

at least one clamping arm having a first end with a beveled edge for penetrating an outer insulation layer of the insulated electrical conductor;

a cap for insertion into said first end of said housing after an end of the insulated electrical conductor is inserted into said first end of said housing,

wherein said at least one clamping arm is positioned within said housing such that once the end of the insulated electrical conductor is inserted into said housing, the insertion of said cap into the first end of said housing causes said first end of said at least one clamping arm to penetrate through the outer insulation layer to make electrical contact with the outer conductor of the insulated electrical conductor,

wherein as the cap is inserted into the first end of the said housing, the cap pushes said at least one clamping arm such that the beveled edge of said at least one clamping arm interacts with a beveled edge on the housing such as to cause the first end of said at least one clamping arm to penetrate the outer insulation layer and make electrical contact with the outer conductor of the insulated electrical conductor.

39. (Previously Presented) An electrical connector for coupling to an insulated electrical conductor of a coaxial cable type having a center conductor enclosed in an inner insulation layer and a conductive sheath around the inner insulation layer which is enclosed in an outer insulation layer, comprising:

a housing having a first end for receiving an end of an insulated electrical conductor;

at least one clamping arm having a first end shaped for penetrating an outer insulation layer of the insulated electrical conductor, wherein said at least one clamping arm is positioned within said housing,

a cap for insertion into said first end of said housing after an end of the insulated electrical conductor is inserted into said first end of said housing,

beveled ring; and

compression ring,

wherein inserting the cap into the first end of the housing causes the cap to push the compression ring such that the compression ring contacts and pushes said beveled ring such that a beveled edge of the beveled ring engages said at least one clamping arm causing the first end of said at least one clamping arm to penetrate the outer insulation layer and make electrical contact with the outer conductor of the insulated electrical conductor.

40. (Previously Presented) An electrical connector for coupling to an insulated electrical conductor of a coaxial cable type having a center conductor enclosed in an inner insulation layer and a conductive sheath around the inner insulation layer which is enclosed in an outer insulation layer, comprising:

a housing having a first end for receiving an end of the insulated electrical conductor;

at least one clamping arm having a first end shaped for penetrating an outer insulation layer of the insulated electrical conductor;

a cap for insertion into said first end of said housing after an end of the insulated electrical conductor is inserted into said first end of said housing,



wherein said at least one clamping arm is positioned within said housing such that once the end of the insulated electrical conductor is inserted into said housing, the insertion of said cap into the first end of said housing causes said first end of said at least one clamping arm to penetrate through the outer insulation layer and to make electrical contact with the outer conductor of the insulated electrical conductor; and

an insulation section attached to the housing, wherein the insulation section has an aperture for receiving a protruding center conductor of the insulated electrical conductor, where said housing and insulation section is adapted to receive the end of the insulated electrical conductor which has a portion of the center conductor protruding from an otherwise flush end of the insulated electrical conductor such that the protruding center conductor passes through the aperture in the insulation section and protrudes into a second end of the connector, and where the insulation section electrically insulates the center conductor from the housing.

41. (Previously Presented) An electrical connector for coupling to an insulated electrical conductor of a coaxial cable type having a center conductor enclosed in an inner insulation layer and a conductive sheath around the inner insulation layer which is enclosed in an outer insulation layer, comprising:

a housing having a first end for receiving an end of an insulated electrical conductor;

at least one clamping arm having a first end shaped for penetrating an outer insulation layer of the insulated electrical conductor,

a cap for insertion into said first end of said housing after an end of the insulated electrical conductor is inserted into said first end of said housing,

wherein said at least one clamping arm is positioned within said housing such that once the end of the insulated electrical conductor is inserted into said housing, the insertion of said cap into the first end of said housing causes said first end of said at least one clamping arm to penetrate the outer insulation layer and to make electrical contact with the outer conductor of the insulated electrical conductor; and

an insulation section having an aperture therethrough, and an electrically conductive pin located in the aperture of the insulation section such that the pin protrudes into the first end of the connector and protrudes into a second end of the connector,

wherein the center conductor of the insulated electrical conductor makes electrical contact with the pin protruding into the first end of the connector as the end of the insulated electrical conductor is inserted into the first end of the connector.

42. (Previously Presented) An electrical connector for coupling to an insulated electrical conductor of a coaxial cable type having a center conductor enclosed in an inner insulation layer and a conductive sheath around the inner insulation layer which is enclosed in an outer insulation layer, comprising:

a housing having a first end for receiving an end of an insulated electrical conductor;

at least one clamping arm having a first end shaped for penetrating an outer insulation layer of the insulated electrical conductor; and

a cap for insertion into said first end of said housing after an end of the insulated electrical conductor is inserted into said first end of said housing, wherein the cap comprises at least one protrusion which provides strain relief when the cap is inserted into the first end of the

connector while the end of the insulated electrical connector is inserted in the first end of the connector,

wherein said at least one clamping arm is positioned within said housing such that once the end of the insulated electrical conductor is inserted into said housing, the insertion of said cap into the first end of said housing causes said first end of said at least one clamping arm to penetrate the outer insulation layer and to make electrical contact with the outer conductor of the insulated electrical conductor.

43. (Previously Amended) An electrical connector for coupling to an insulated electrical conductor, comprising:

a housing having an open end for receiving an end of the insulated electrical conductor;

means for penetrating an outer insulation layer of the insulated electrical conductor, the means for penetrating being disposed within the housing;

means for inserting an insulated electrical conductor into the open end of the housing such that the means for penetrating surrounds the insulated electrical conductor; and

means for urging the penetration means, said means for urging being slidably pushed into the open end of the housing after the penetration means surrounds the insulated electrical conductor to force the penetration means to penetrate the outer insulation layer of the insulated electrical conductor.

44. (Currently Amended) An electrical connector for coupling to an insulated electrical conductor, comprising:

a housing having an open end for receiving an end of an insulated electrical conductor;  
means for inserting the insulated electrical conductor into the open end of the housing;  
at least one clamping arm for penetrating the insulated electrical conductor, the at least one clamping arm being disposed within the housing so as to surround the insulated electrical conductor as it is inserted in the housing; and

means for engaging the at least one clamping arm, wherein insertion of the means for engaging the at least one clamping arm into the open end of the housing causes the at least one clamping arm to penetrate the outer insulation layer of the insulated electrical conductor, said housing being configured to receive an end of the insulated electrical conductor which has a protruding portion of an inner insulation layer and a protruding portion of a center conductor both protruding from an otherwise flush end of the insulated electrical conductor, and the protruding portion of the center conductor protruding from the protruding portion of the inner insulation layer such that the protruding portion of the inner insulation layer acts to electrically insulate the center conductor from the housing, and

the protruding portion of the center conductor protruding into a second end of the connector.